PITTSBURGH®

MOTORIZED ROTARY LASER LEVEL KIT

Item 69247

⚠WARNING

**Read this material before using this product.
Failure to do so can result in serious injury.
SAVE THIS MANUAL.**

When unpacking, make sure that the product is intact and undamaged.
If any parts are missing or broken, please call 1-800-444-3353 as soon as possible.

Visit our website at: http://www.harborfreight.com
Email our technical support at: tech@harborfreight.com

Copyright© 2011 by Harbor Freight Tools®. All rights reserved. No portion of this manual or any artwork contained herein may be reproduced in any shape or form without the express written consent of Harbor Freight Tools. Diagrams within this manual may not be drawn proportionally. Due to continuing improvements, actual product may differ slightly from the product described herein. Tools required for assembly and service may not be included.

Save This Manual

Keep this manual for the safety warnings and precautions, assembly, operating, inspection, maintenance and cleaning procedures. Write the product's serial number in the back of the manual near the assembly diagram (or month and year of purchase if product has no number). Keep this manual and the receipt in a safe and dry place for future reference.

IMPORTANT SAFETY INFORMATION

In this manual, on the labeling, and all other information provided with this product:

This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

⚠ DANGER

DANGER indicates a hazardous situation which, if not avoided, will result in death or serious injury.

⚠WARNING

WARNING indicates a hazardous situation which, if not avoided, could result in death or serious injury.

⚠CAUTION

CAUTION, used with the safety alert symbol, indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

NOTICE

NOTICE is used to address practices not related to personal injury.

CAUTION

CAUTION, without the safety alert symbol, is used to address practices not related to personal injury.

General Safety Warnings

WARNING! Read all safety warnings and instructions. Save all warnings and instructions for future reference.

1. **Avoid direct eye exposure to laser light. Do not direct the laser beam into the eyes of any person or animal.** Doing so may cause severe eye injury or permanent blindness.
2. Verify Laser Level is in the "Off" position before making any adjustments or changing the batteries.
3. Position batteries in proper polarity and do not install batteries of different types, charge levels, or capacities together.
4. Remove batteries if Laser Level is not to be used for a long period of time.
5. The Laser Level is a delicate instrument; do not drop or jar the Laser Level.
6. If installing on a wall surface without the Tripod (3), verify that installation surface has no hidden utility lines before drilling or driving screws.
7. Keep work area clean and well lit.
8. This product is not a toy. Keep it out of reach of children.
9. Keep children and bystanders away while operating Laser Level.
10. Inspect before every use; do not use if parts are loose or damaged.
11. Stay alert, watch what you are doing and use common sense when operating Laser Level. Do not use Laser Level while you are tired or under the influence of drugs, alcohol or medication.
12. Dress properly. Do not wear loose clothing or jewelry. Keep your hair, clothing and gloves away from moving parts.
13. Maintain labels and nameplates on the tool. These carry important safety information. If unreadable or missing, contact Harbor Freight Tools for a replacement.
14. **WARNING:** The brass components of this product contain lead, a chemical known to the State of California to cause birth defects (or other reproductive harm). (California Health & Safety code § 25249.5, *et seq.*)
15. The warnings, precautions, and instructions discussed in this instruction manual cannot cover all possible conditions and situations that may occur. It must be understood by the operator that common sense and caution are factors which cannot be built into this product, but must be supplied by the operator.

SAVE THESE INSTRUCTIONS.

Specifications

Laser Range	Projects Up to 100′
Max. Tripod Height	48″
Rotation Capacity	360°
Batteries	(4) ‘AA’ Batteries

PITTSBURGH
Rotary Laser Level
ITEM 69247
WARNING
To prevent serious injury and blindness: Do not use included goggles for eye protection. Read manual before use.
Serial:
11k
Made in China.
DANGER
LASER LIGHT
AVOID DIRECT EYE EXPOSURE
Max. Output: ≤ 5mW,
Wavelength: 650 nm ±10 nm
CLASS IIIa LASER PRODUCT
This product complies with 21 CFR 1040.10 and 1040.11
Diode Mfr.: Sean & Stephen Corp.
4F, NO3, Lane 335, Sec 4, Hsin-Yi Rd., Taipei, China
Manufacture Date:

Instructions for Putting Into Use

Read the ENTIRE IMPORTANT SAFETY INFORMATION section at the beginning of this manual including all text under subheadings therein before set up or use of this product.

⚠WARNING

TO PREVENT SERIOUS INJURY FROM ACCIDENTAL OPERATION:
Turn the Power Switch to Off before adjusting Level.

Note: For additional information regarding the parts listed in the following pages, refer to the Assembly Diagram on the last page.

Installing The Batteries

1. Loosen the Battery Cover Knob (5A) and remove the Battery Cover (2A). See Figure 1, below.
   NOTE: The Knob will NOT come all the way out.

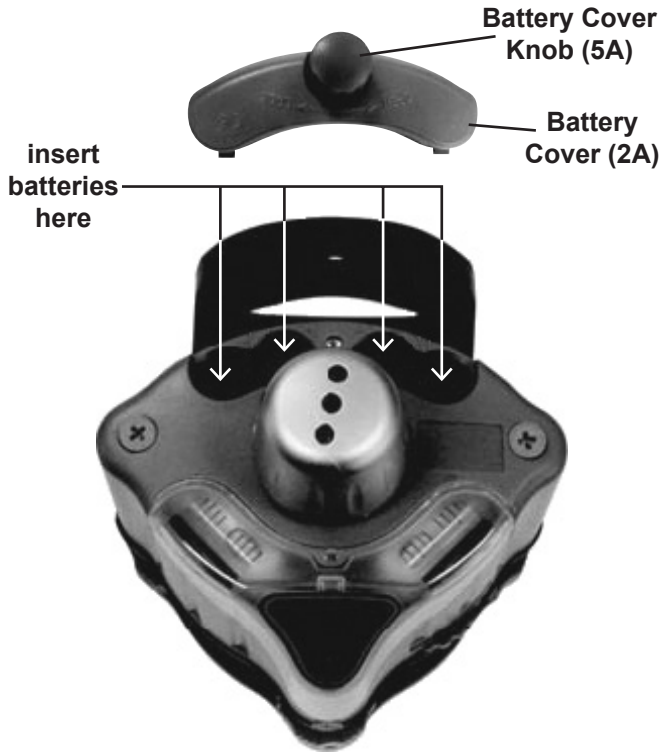


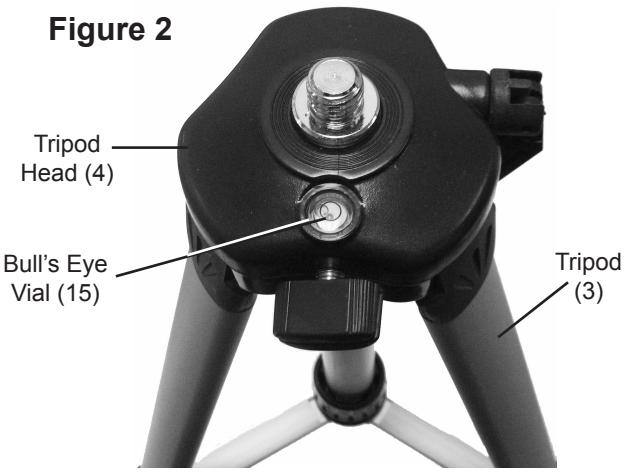
Figure 1

2. Install four ‘AA’ Batteries, making sure to follow the polarity marked in the Battery Compartment.
3. Replace the Battery Cover and turn Battery Cover Knob until Cover is secured into place.

Mounting To Tripod (3)

1. If mounting the Laser Level with the Tripod (3), position the Tripod on a flat and level ground surface. Extend Tripod Legs to the desired height, using the Bull's Eye Vial (15) located on the Tripod Head (4). See Figure 2, below.

Figure 2



2. Once the Tripod is level, lock the legs in place using the clamps on each leg.

3. Then thread Wall Bracket (7A) onto Tripod Head. See Figure 3, below.

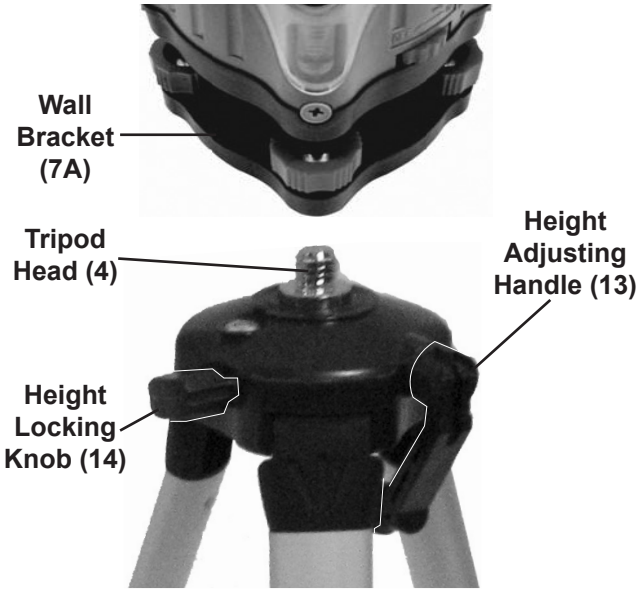


Figure 3

4. Once the Wall Bracket (7A) is secured on the head, you can use the Height Adjusting Handle (13) to raise the Level Housing to the desired height. Once the desired height is reached, lock the height in place by turning the Height Locking Knob (14). See Figure 3.

Mounting To Wall

1. The Laser Level may also be installed on a wall surface without the Tripod. To do so, use the Wall Bracket (7A) to secure the Laser Level to the wall.

2. First, set the Level Housing against the part of the wall where you wish to install the Laser Level. **WARNING!** Verify that installation surface has no hidden utility lines before drilling or driving screws.

3. Use a pencil to mark drill holes through the Wall Bracket (7A). See Figure 4, below.

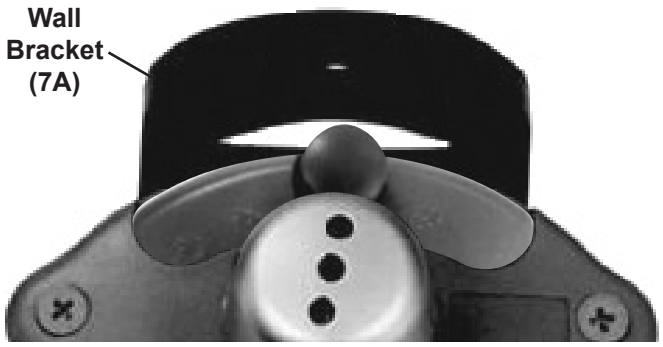


Figure 4

4. Secure the Laser Level to the wall surface using screws and plastic anchors (not included). **NOTE:** The mounting screws must be long enough to allow for the Wall Bracket frame to fit over them.

5. Once installed on wall, level the Laser, using the Leveling Knobs (8A) located on each side of the Laser and the Level Vials (9A) located at the top of the Laser.

Operating Instructions

Read the ENTIRE IMPORTANT SAFETY INFORMATION section at the beginning of this manual including all text under subheadings therein before set up or use of this product.

Initial Leveling

1. When the Laser Level is properly positioned, activate the Laser by turning the Power / Rotation Control Switch (11A), clockwise. Then recheck the Level Vials (9A) to make sure the Laser Level has not been bumped or moved.
2. The rotation speed of the Laser Head Cover (6A) can be set by adjusting the Rotation Control Switch. Turn **clockwise** to make the beam rotate faster. Turn **counterclockwise** to slow the beam down.
3. Mark the desired measurement(s). Then turn off the Laser Level by turning the Rotation Control Switch counterclockwise all the way.

Equalizing Height Of Distant Objects

1. For example, if you wish to install cement footings for a storage shed, first determine the desired height of any one of the footings.
2. Align the laser beam with the top surface of the reference footing, and check to make sure the Vial Levels (9A) are level with the ground.
3. Direct laser beam toward each of remaining footing locations. On reference stakes at those locations, mark the spot the Laser illuminates. This indicates desired top surface of that footing.
4. This technique can be used for many similar applications, i.e., to align pictures on a wall.

Installing Horizontal Or Vertical Objects

1. For example, to install a chair rail on an interior wall, first mark the desired height of the rail.
2. Align the Laser Level with that point, and check to make sure the Vial Levels (9A) are level with the floor.
3. Shine laser beam on the adjoining wall, and have an assistant mark that location.
4. Then, install the chair rail in a direct line between the two points.
5. This technique can be used to install vertical or 45 degree angle objects.

Checking a Slope

1. For example, to determine the slope of a floor, place the Laser Level at one end of the floor, using the Tripod (3).
2. Check to make sure the Vial Levels (9A) are level.
3. Measure the vertical drop from the Laser Lens to the floor surface.
4. Shine the laser beam on a ruler held vertical at the other end of the floor. The difference in these measurements is the amount of slope in the floor.
5. This technique can be used to design slope, such as when constructing an outdoor surface which will require a runoff slope.

Maintenance and Servicing

Procedures not specifically explained in this manual must be performed only by a qualified technician.

⚠WARNING

TO PREVENT SERIOUS INJURY FROM ACCIDENTAL OPERATION:
Turn OFF the Laser Level before performing any inspection, maintenance, or cleaning procedures.

TO PREVENT SERIOUS INJURY FROM TOOL FAILURE: Do not use damaged equipment.
If abnormal noise or vibration occurs, have the problem corrected before further use.

Cleaning, Maintenance, and Lubrication

1. **BEFORE EACH USE,** inspect the general condition of the Laser Level. Check for loose hardware, misalignment or binding of moving parts, cracked or broken parts, and any other condition that may affect its safe operation.
2. **AFTER USE,** wipe external surfaces of the tool with clean cloth. Do not immerse the Laser Level in any liquids.
3. Store the Laser Level indoors and out of children's reach.

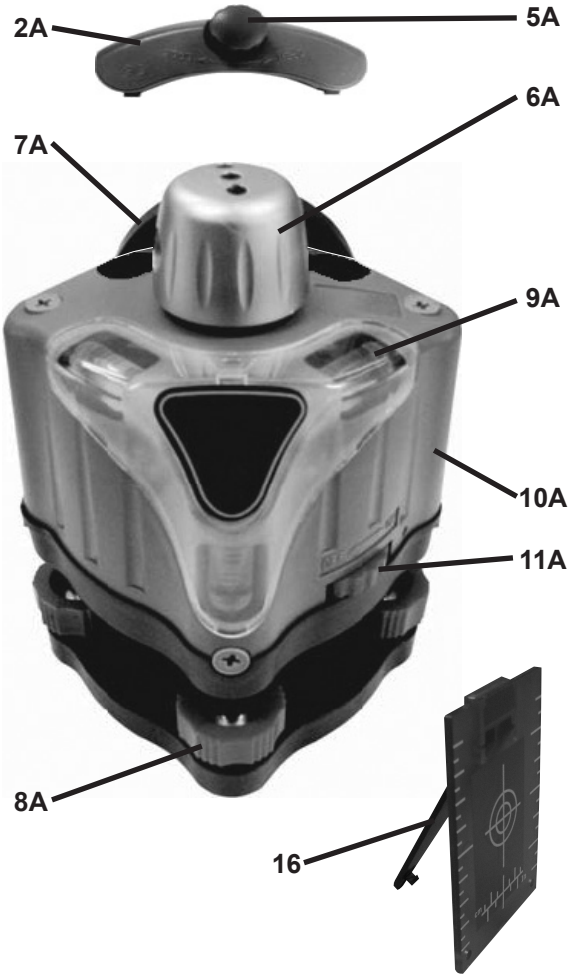
PLEASE READ THE FOLLOWING CAREFULLY

THE MANUFACTURER AND/OR DISTRIBUTOR HAS PROVIDED THE PARTS LIST AND ASSEMBLY DIAGRAM IN THIS MANUAL AS A REFERENCE TOOL ONLY. NEITHER THE MANUFACTURER OR DISTRIBUTOR MAKES ANY REPRESENTATION OR WARRANTY OF ANY KIND TO THE BUYER THAT HE OR SHE IS QUALIFIED TO MAKE ANY REPAIRS TO THE PRODUCT, OR THAT HE OR SHE IS QUALIFIED TO REPLACE ANY PARTS OF THE PRODUCT. IN FACT, THE MANUFACTURER AND/OR DISTRIBUTOR EXPRESSLY STATES THAT ALL REPAIRS AND PARTS REPLACEMENTS SHOULD BE UNDERTAKEN BY CERTIFIED AND LICENSED TECHNICIANS, AND NOT BY THE BUYER. THE BUYER ASSUMES ALL RISK AND LIABILITY ARISING OUT OF HIS OR HER REPAIRS TO THE ORIGINAL PRODUCT OR REPLACEMENT PARTS THERETO, OR ARISING OUT OF HIS OR HER INSTALLATION OF REPLACEMENT PARTS THERETO.

Parts List and Assembly Diagram

Part	Description	Qty.
1A	'AA' Battery (not included)	4
2A	Battery Cover	1
3	Tripod	1
4	Tripod Head	1
5A	Battery Cover Knob	1
6A	Laser Head Cover	1
7A	Wall Bracket	1
8A	Leveling Knob	3

Part	Description	Qty.
9A	Level Vial	3
10A	Level Housing	1
11A	Power / Rotation Control Switch	1
12	Glasses (not shown)	1
13	Height Adjusting Handle	1
14	Height Locking Knob	1
15	Bull's Eye Vial	1
16	Target with stand and magnet	1



Record Product's Serial Number Here:

_____

Note: If product has no serial number, record month and year of purchase instead.

Note: Some parts are listed and shown for illustration purposes only, and are not available individually as replacement parts. Parts not shown to scale.

REV 11d

LIMITED 90 DAY WARRANTY

Harbor Freight Tools Co. makes every effort to assure that its products meet high quality and durability standards, and warrants to the original purchaser that this product is free from defects in materials and workmanship for the period of 90 days from the date of purchase. This warranty does not apply to damage due directly or indirectly, to misuse, abuse, negligence or accidents, repairs or alterations outside our facilities, criminal activity, improper installation, normal wear and tear, or to lack of maintenance. We shall in no event be liable for death, injuries to persons or property, or for incidental, contingent, special or consequential damages arising from the use of our product. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation of exclusion may not apply to you. THIS WARRANTY IS EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS.

To take advantage of this warranty, the product or part must be returned to us with transportation charges prepaid. Proof of purchase date and an explanation of the complaint must accompany the merchandise. If our inspection verifies the defect, we will either repair or replace the product at our election or we may elect to refund the purchase price if we cannot readily and quickly provide you with a replacement. We will return repaired products at our expense, but if we determine there is no defect, or that the defect resulted from causes not within the scope of our warranty, then you must bear the cost of returning the product.

This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

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